

CTC Quarterly Bulletin

4th Qtr, FY 00, No. 01-10, APR 01

“Company Resupply TTP”

“The Light Infantry Chemical Officer and the NTC Experience”

“Skills and Development of the Battle Staff”

**“Communications: The Critical Link
for the Maintenance Control
Section”**

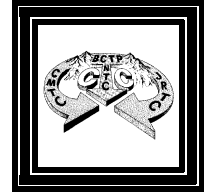
**“The HMMWV-mounted Scout Platoon in a
TF Movement to Contact”**

**“Aviation Company Command Posts:
Nerve Center *or* Black Hole?”**

“Digging In: A Lost Art”

Techniques and Procedures

**CENTER FOR ARMY LESSONS LEARNED (CALL)
U. S. ARMY TRAINING AND DOCTRINE COMMAND (TRADOC)
FORT LEAVENWORTH, KS 66027-1327**



FOREWORD

This CTC Quarterly Bulletin focuses on Techniques and Procedures your unit can use, so you have the best chance to “do it right the first time.” If the lessons in this bulletin and subsequent CTC Quarterly Bulletins help you avoid making a mistake, then the lessons learned process is working well.

The relevant lessons for the Total Army are there in the field with you. CALL has the mission and the means to share those lessons with the rest of the U. S. Army. This bulletin is one way to do that.

If you or your unit have a “lesson” that could help other units do it right the first time, send it to us. Don't worry about how polished your “article” is. CALL can take care of the editing, format and layout. We just want the raw material that can be packaged, and then shared with everyone.

So take the time to put your good ideas on paper and then get them to CALL. We'll acknowledge receipt and then work with you to put your material in publishable form. It may show up in *News From the Front!*, a bimonthly publication, or in the *CTC Quarterly Bulletin*. Select material will also be put “on line” in *Training Techniques*, a new publication on the CALL Home Page.

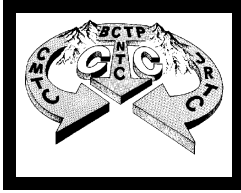
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Combat Training Center (CTC) “HOW TO” Video Tapes

CALL is distributing CTC-produced “How To” tapes at no cost. These are standard VHS video cassettes. As subsequent tapes are released by the CTCs, CALL will distribute them. In future publications, we will update the list of available tapes. You can order these tapes as you would any CALL publication, *BUT* the videos will be issued on a unit, not individual, basis. As with any product CALL produces, we highly encourage local reproduction of these tapes. The video tapes are also available for viewing on the CALL Website (<http://call.army.mil>).

Is Your Unit Looking for Operations Orders to Facilitate Practicing the MDMP? Well, *Look No Further!*

Recent trends from JRTC, NTC, and CMTC reveal that units typically experience problems with the Military Decision-Making Process (MDMP). Brigades often do not have the opportunity to exercise their staff planning process as often as necessary while at home station. CALL has received permission from NTC and JRTC to disseminate, upon request, Division-level operation orders. The orders are designed to be used by a Brigade Headquarters to train a portion of, or the entire, MDMP. They can also be used to facilitate unit CPXs, simulation exercises, or OPDs.



**Combat Training Center (CTC)
Quarterly Bulletin
4QFY00**



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**CENTER FOR ARMY
LESSONS LEARNED**

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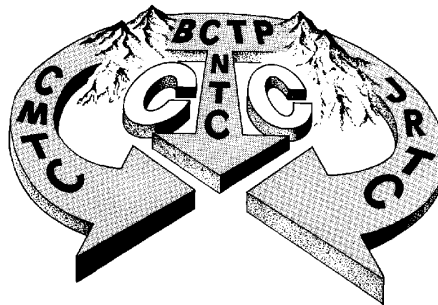
The intent of CALL publications is to share knowledge, support discussion and impart lessons and information in an expeditious manner. This CALL publication is not a doctrinal product. The tactics, techniques and procedures (TTP) observed and reported in this publication are written by soldiers for soldiers. If you have, or your unit has, identified other relevant TTP for the U.S. Army, contact the Managing Editor, Mr. Rick Bogdan, at Coml (913) 684-9581 or DSN 552-9581; FAX DSN 552-9583; e-mail: <bogdanr@leavenworth.army.mil>. Articles must be submitted in either Word Perfect or Word format. Graphs, slides and clipart must be submitted separately from the document in either ppt, pcx or wpg format.

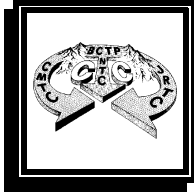
The Secretary of the Army has determined that the publication of this periodical is necessary in the transaction of the public business as required by law of the Department. Use of funds for printing this publication has been approved by Commander, U. S. Army Training and Doctrine Command, 1985, IAW AR 25-30.

Unless otherwise stated, whenever the masculine or feminine gender is used, both are intended.

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The HMMWV-mounted Scout Platoon in a TF Movement to Contact

by CPT Kevin Parker (Grizzly 11), O/C, CMTC



How do you go about assigning a mission to a HMMWV-equipped scout platoon in a Task Force (TF) movement to contact? It is difficult. So difficult, in fact, that most units struggle with it. This article will assist TF leaders in understanding the doctrinal employment of the HMMWV-mounted scout platoon in a TF movement to contact. It addresses the most common mistakes units make in assigning missions to their scout platoons, and presents techniques that will help leaders use their scout platoons more effectively during movement-to-contact operations.

According to current doctrine in **FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion Task Force, and Company Team***; **FM 17-98, *Scout Platoon***; **ARTEP 17-57-10-MTP, *Mission Training Plan for the Scout Platoon***, and **FM 17-97, *Cavalry Troop***, the two doctrinal missions that a scout platoon conducts in support of a TF movement to contact are:

- ✦ **Zone reconnaissance.**
- ✦ **Flank (or rear) screen.**

The most common mistakes that units make employing HMMWV scouts during a movement to contact are:

- **Assigning the platoon a mission – a task and purpose – that is doctrinally inappropriate or a mission that limits the platoon’s ability to accomplish what the TF really wants from the platoon.**
- **Failing to fully understand the capabilities of the HMMWV-equipped scout platoon.**

These two mistakes are linked. When the TF makes one mistake, the other often follows.

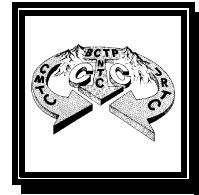
Mission statements for TF scout platoons in a movement to contact are often doctrinally incorrect. They do not effectively focus the platoon’s collection effort.

EXAMPLES:

1. “At xxxx, TF 9-9 scouts move quickly to PL PRINCESS to set a screen to identify the Combat Reconnaissance Patrols (CRPs), Forward Patrol (FP), Forward Security Element (FSE), Flank Guard (FG), and Advance Guard Main Body (AGMB).”
2. “At xxxx, TF 9-9 scouts move rapidly through zone to identify the CRPs, FP, FSE, FG, and AGMB.”

It is obviously important to assign the scout platoon a doctrinally correct mission, not to mention a mission that the platoon can execute. The mission gives the platoon its focus for the operation. In Example 1, the task, to “screen” forward of a moving force, is not a doctrinal task for a scout or cavalry organization. What’s wrong with the second example? Well, it does not even assign a real task and purpose. The purpose in both examples – “to identify the CRPs, FP, FSE, FG, and AGMB” – is very common. It is rarely accomplished, however, because the statement focuses the platoon on names of enemy formations instead of types and numbers of vehicles.

Note: According to FM 17-97, a screen is a security mission that is executed to the front, flank, or rear of a stationary force or to the flank or rear of a moving force. A scout platoon does not move forward of a moving force to set a screen. A scout platoon in front of a moving force conducts reconnaissance -- area, zone, or route depending on the TF mission and commander’s intent.



You cannot expect a scout platoon to accomplish a task that has no basis in doctrine. The platoon simply has no doctrinal foundation for planning and executing such a mission. As previously stated, ARTEP 17-57-10 MTP (the scout platoon MTP) lists the two missions given to a scout platoon during a movement to contact. They are:

- ✦ **Flank (or rear) screen of a moving force.**
- ✦ **Zone reconnaissance.**

A TF assigning any other task to its scout platoon during a movement to contact departs from the doctrinal employment of its scout platoon.

Assigning a purpose for the mission is as important as assigning the correct task. Of course, the TF wants to know the location of the CRPs, FP, FSE, FG, and the AGMB. However, does the TF really want the scout platoon to report where the “FSE” is, or does the TF want the scout platoon to report numbers, types, locations, and actions of enemy vehicles and forces? If the scout platoon is tasked to find the FSE, invariably that is what they will report. Unfortunately, the observers will probably only see part of the enemy formation. That means the FG might actually be an FP, or the FSE might really be the FP.

Get the idea?

Let the S2 decide what the formations are. All we need from the scouts is spot reports that include the size, activity, location, time, equipment, and possibly the uniform of the enemy observed. Negative spot reports are also important.

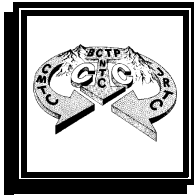
After determining what we want the scouts to report, we quickly discover that our purpose in the above examples is really the same as our task. A scout conducting a zone reconnaissance is already going to report all enemy forces with which he comes in contact. What, then, is the real purpose of the operation?

Here are some possible purposes for a scout platoon zone reconnaissance in support of a TF movement to contact:

- **“... to enable the TF to quickly maneuver two company teams against the enemy’s weak flank.”**
- **“... to facilitate the TF employment of FASCAM to deny the enemy a maneuver corridor.”**
- **“... to prevent the lead company team from becoming fixed by an inferior force.”**

All three tell the platoon *why* it must find the enemy in zone and give the platoon a priority for intelligence collection when the friction starts. In short, the purpose of a zone reconnaissance is not to find the enemy. Finding the enemy is an inherent part of a zone reconnaissance. **The purpose of the operation is *why* we are trying to find the enemy.**

Remember, the mission is the main objective that the TF wants the scout platoon to accomplish. It is not the only thing. The scout platoon should be assigned other specified tasks in the TF Reconnaissance and Surveillance (R&S) operations order (OPORD) and in Paragraph 3c of the TF OPORD. The R&S matrix should be part of the TF R&S OPORD. It should instruct the platoon what to look for, where to look (Named Areas of Interest (NAIs)/Targeted Areas of Interest (TAIs)), when to look, and for how long to look. The enemy situation briefed in paragraph 1a of the OPORD should be very detailed. It should tell the scouts how the enemy fights and what equipment and manpower the enemy will bring to the fight. All these products are necessary if the scout platoon is expected to accomplish its mission to standard.



Capabilities and Limitations of a HMMWV-equipped scout platoon also present challenges to Task Forces as they struggle with assigning scout platoons their missions during a TF movement to contact. During almost every movement to contact conducted at CMTTC, scout platoons perform what O/Cs refer to as the **“movement to death.”** The scout platoon leader is told to get his platoon to some piece of ground or phase line as quickly as possible and identify the CRPs, FP, FSE, FG, and AGMB. The platoon leader usually tells the S3 that the only way to get to the assigned Observation Post (OP) locations quickly enough to accomplish the mission is to drive in column, at a high rate of speed, on a road, across four danger areas. The answer given by the S3 is generally something like, “Well, speed is security.”

Consider the following principles when tasking a HMMWV scout platoon during a movement to contact:

● **EVERY POTENTIAL ADVERSARY IN THE WORLD CAN DESTROY A HMMWV -- EASILY.**

- HMMWV scout platoons *cannot fight for intelligence* in the same manner as CFV scout platoons.
- HMMWV scout platoons develop the situation with *stealthy reconnaissance* and *indirect fire*, both of which take time.
- For a HMMWV scout platoon, *Speed IS NOT Security; Speed IS Death.*
- When a HMMWV scout comes into direct fire contact with a BMP or tank -- *the HMMWV dies.*
- A HMMWV scout *will come into direct fire contact with a BMP or tank* if the plan requires the HMMWV-mounted scout to move quickly on roads that are on major avenues of approach or to move quickly across danger areas.
- HMMWV scouts use cover and concealment -- wooded areas, low ground, reverse slope of intervisibility (IV) lines -- to remain undetected and survive; they try not to move on roads -- especially in daylight.
- A HMMWV moves slowly when it is not on a road.
- Scouts take a long time to train; they are not easily replaced.
- I really want my scouts to be alive for the next mission when this mission is over.
- We train like we will fight in war, so ask yourself, *“Would I really give my scout platoon this mission if real bullets were flying?”*

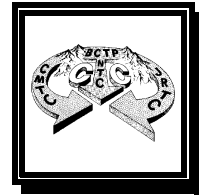
If the TF keeps these principles in mind when assigning the scout platoon its mission, it will be able to better utilize the platoon by giving it a mission it can execute.

TACTICS, TECHNIQUES AND PROCEDURES (TTP):

Okay, so now we know some of the problems. *How do we effectively employ the scout platoon during a TF movement to contact?*

Current doctrine states that scouts should conduct either a zone reconnaissance in front of the TF or flank screen of the TF when it conducts a movement to contact. Most commanders choose zone reconnaissance for their scout platoons. Here's why:

- The scouts can find the enemy before the TF's advance guard company makes contact.
- The scouts can call for fire on enemy formations before the enemy makes contact with the TF.
- The scouts can serve as triggers and observers for the TF indirect fire plan.
- The scouts can answer TF priority intelligence requirements (PIRs).
- The scouts can observe TF decision points.



Unfortunately, there is a huge challenge to conducting a zone reconnaissance in front of a Task Force conducting a movement to contact -- ***TIME***.

Time is the major hurdle the platoon must overcome when conducting a zone reconnaissance in front of a moving force.

- **A zone reconnaissance is a relatively slow operation -- even when the platoon remains mounted.**
- **Properly crossing danger areas takes time.**
- **Daylight movement on roads in hostile territory is very dangerous in a HMMWV.**
- **Moving cross country or through the woods in a HMMWV is slow.**
- **Bounding within a section once the platoon crosses the probable Line of Contact (LC) is slow.**
- ***The TF is moving forward at a relatively steady pace in tracked vehicles and does not want to stop.***

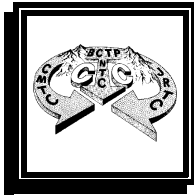
Assuming that the TF does not want to task its scout platoon to conduct a "MOVEMENT TO DEATH," the TF must find a way to give the scout platoon time to conduct the zone reconnaissance.

- **An early Line of Departure (LD) time for the Scouts is the best solution but not always an option, given the brigade and division situations.**
- ***Air insertion of dismounted Scouts to set three deep OPs overwatching key terrain deeper in zone as soon as the TF LDs is an option.*** This technique allows the mounted scouts quicker movement into zone because of the increased security provided by the OPs.
- **Give the scout platoon a "headstart" at LD and have the advance guard company delay its LD until the scouts are 3km into the zone -- obviously METT-TC dependent.**
- **Plan to maintain a steady, but slow rate of march at the TF level and let the scouts do the same.**
- **Give the platoon a probable LC, and give the platoon fewer NAIs to observe between the LD and the probable LC.**
- **Focus the platoon's collection effort on answering critical PIR and not reporting culverts, bridges.**

These techniques can help the TF give the scout platoon more time to conduct a zone reconnaissance in support of a TF movement to contact.

Here is another technique to make the zone reconnaissance more successful: attach the scout platoon to the TF advance guard company/team (CO/TM). When using this technique, the platoon still conducts a zone reconnaissance and the link between the scout platoon and the lead CO/TM is better defined and more efficient. Benefits of this method are:

- **The scout platoon leader is part of the CO/TM orders process from planning through execution.**
- **The scout platoon can assist the lead company team with command and control, flank security, calling indirect fire missions, and conducting route reconnaissance.**
- **The CO/TM helps the scout platoon by providing overwatch at danger areas.**
- **The CO/TM provides CASEVAC.**
- **The platoon can call upon the firepower of the CO/TM to quickly destroy CRP elements with which it comes in contact.**



Although effective when conducted properly, this method is not easy and does have drawbacks.

- **The scout platoon must stay relatively close (1-3 km) to the CO/TM, meaning that the platoon might not always give the amount of early warning that many TF Commanders desire.**
- **Rehearsals must be conducted at PLT and CO/TM levels to make this method work.**
- **Units must practice this method as part of Situational Training Exercise (STX) training.**
- **Spot reports do not appear at the Tactical Operations Center (TOC) in a timely manner if the scout platoon and CO/TM communications and reporting plan is not established, understood, and rehearsed prior to the TF rehearsal.**
- **The TF does not have direct control of the scout platoon.**

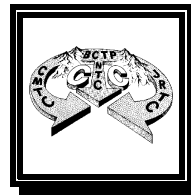
The idea of attaching the scout platoon to the lead CO/TM in the TF makes many commanders feel uneasy. Yet, by doing so, the security of the scout platoon can be greatly enhanced. This method does not succeed when the scout platoon remains under TF control. The level of direct coordination necessary to make this method succeed cannot be achieved.

The other mission for the scout platoon during the TF movement to contact is *flank security*. There are a number of advantages that this mission provides for the TF.

- **The scout platoon will probably survive this mission intact.**
- **It is a doctrinal mission that the platoon can accomplish.**
- **The TF is much less likely to be enveloped by elements of the AGMB or elements moving to the flank of the Motorized Rifle Regiment (MRR) with scouts on the TF flanks to provide early warning.**
- **Scouts can be tasked to maintain contact with adjacent units to prevent a gap from developing between any units to the left or right flank of the TF.**
- **Depending on the terrain, scouts can still report enemy movement and call for indirect fire in the main battle area.**
- **The scouts will be in a better position to respond to a fragmentary order (FRAGO) to find the enemy's weak flank once the main battle begins.**
- **The platoon will be in position to observe special munitions employed by both friendly and enemy units that attempt to hinder opposition movement along a flank mobility corridor.**

The flank security mission is even more attractive considering the current Army force structure. With only three CO/TMs in a BN/TF, combat power is at a premium. Gone are the days of the TF Diamond when the commander could use the trail CO/TM to react to threats on his flanks. Scout platoons are going from 10 HMMWVs and 30 personnel to 6 HMMWVs and 18 personnel. Brigades now have a Brigade Reconnaissance Troop (BRT). A TF, therefore, has less combat power available to secure its flanks and less flexibility to deal with threats on its flanks. The good news is the BRT.

The BRT's mission during a movement to contact is to conduct a zone reconnaissance. The BRT focuses on finding the enemy in front of the brigade in zone. With the brigade's intelligence assets committed to finding the enemy to the front, the TFs are responsible for conducting flank security for the brigade. If a TF scout platoon is conducting a flank security mission, the TF can still focus its combat power forward. Of course, the TF must still have a plan to react to a threat on its flanks. The scout platoon can also maintain contact with adjacent units while continuing to conduct reconnaissance in support of the TF mission. Under the current force structure with a relatively small TF scout platoon and a BRT, tasking the TF scout platoon to conduct flank security during a TF movement to contact is undoubtedly the most logical mission for the platoon.



When assigning the TF scout platoon its mission in support of a TF movement to contact, the TF must understand the *capabilities and limitations* of the platoon. The TF must then decide, based on terrain and the current friendly and enemy situation, which task – *flank security or zone reconnaissance* – and purpose to give the platoon. Hopefully, this article will assist the TF in assigning the platoon an executable mission.

U.S. Army doctrine is flexible. In the U.S. Army, creativity is admired and rewarded – **WHEN IT WORKS**. How else would we come up with TTPs? Some units may attempt to find innovative ways to employ their scout platoons that do not fall within current doctrine. Consider the following before becoming creative:

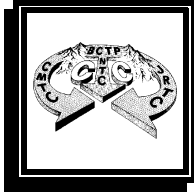
● **Can my scout platoon doctrinally conduct the mission?** If the answer is no, then do not try to be creative. Ensure, first, that the platoon can execute to doctrinal standard. If it cannot accomplish a doctrinal mission, it certainly cannot accomplish a non-doctrinal mission.

● **Can I train the platoon to conduct this mission during an STX?** If you cannot conduct maneuver training, do not try something non-doctrinal – it will not work.

● **Did this new method work at a CTC against an uncooperative enemy over which I had no control over?** If not, do not try it again.

If the new method passes the above three questions, it works, and you still think it's a good idea, write about it, and let the rest of the U.S. Army benefit from your creative TTP.☺





DIGGING IN: A LOST ART

by CPT Paul McNamara and SSG Nathan Broussard, JRTC O/Cs



*The area of operation consisted of rolling hills, thick with vegetation. Always elusive, the enemy used the terrain to mask his movements and conceal himself when hiding. Appearing from nowhere in three-man elements, the enemy attacked high pay-off targets with direct fire and 82mm mortars supported by attack helicopters. The enemy's ghost-like ability to attack and disappear is devastating. The mortar attacks have friendly commanders especially worried; they are almost undetectable until the rounds impact. The only real defense is preventive: digging in works. Commanders mandate that everyone understands the importance of digging a fighting position. Understanding, however, does not stop shrapnel. The only warning that the ADA firing team got of the attack was when the steel slivers blasted through their ranks. They may have understood that they **SHOULD** have dug in, but they were too **DEAD** to do anything about it now.*

That scenario is not farfetched. It happens month after month at the Joint Readiness Training Center (JRTC). Friendly forces typically have a good read on the enemy situation and understand their strengths and capabilities. That includes detailed historical records of how the enemy employs mortars. Yet BLUFOR units continually fail to dig in. All too often, Stinger and Avenger teams do not even dig hasty fighting positions. The results are the same EVERY rotation: unnecessary loss of life and probable mission failure. Dig in and do it right. Failing to do either means more than just losing. It means death.

Constructing a proper fighting position is not easy. Most unit SOPs detail the construction of fighting positions. Teams usually understand the SOP and the importance of digging in. Often, lack of motivation is the reason the teams fail to prepare positions to standard. That is a clear failure of leadership. Platoon Sergeants and Platoon Leaders must understand the standard and enforce it. Yet leadership is not the primary reason teams do not dig in. Frequently, teams do not construct a standardized fighting position at home station. When they arrive at JRTC, they do not know how to select a good site, much less dig in properly. The lack of knowledge begins at the top. The leaders in most platoons have never constructed a fighting position to standard. You cannot enforce the standard you do not know.

During defensive operations, everyone must understand that digging means survival and, therefore, mission success. Most unit SOPs that outline exactly what teams are supposed to do and when they are supposed to do it. These SOPs normally state what the platoon leadership must complete for the unit to survive the battle. Yet, even assuming that these leaders understand the importance of getting teams dug in, they do not coordinate for engineer support although the platoon leader sits next to the ADO in the TOC. Even if Platoon Leaders do coordinate to get engineer support, they often wait too late. Trends at JRTC show that it is NOT a failure of the battalion Task Force to support air defenders with digging assets. In fact, the opposite is true. An ADO who articulates the enemy air threat normally will receive the support his teams require. In any case, there is an astonishing number of idle dozers on the battlefield. Team initiative goes a long way. They can coordinate their own engineer support. Instead, they almost always miss the NLT time to defend and are destroyed by direct or indirect fire.



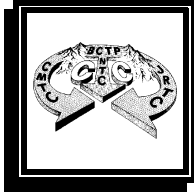
Knowing how to construct a fighting position and the time required is only half the battle. The other half is using the terrain to your advantage. Teams normally pull straight in and establish positions at the edge of a wood line. That may be best. It also may be the primary avenue of approach for the ground threat. It all depends on the surrounding terrain and the threat. Yet teams fail to consider the enemy situation and do not analyze terrain according to OCOKA. As a result, they often position themselves directly on the enemy's primary ground avenue of approach -- the worst possible choice. Answering several basic questions can avoid such an often-fatal mistake. Consider whether the enemy is mounted or dismounted. Does he expect friendly forces to be in the location? How might the enemy move through this terrain? Analyze how the enemy may maneuver against your unit if he detects you. Wood lines are not the golden solution. The best position may be in the open on the reverse slope of a hill. Another element is the ground avenue of approach versus the air avenue of approach. Orient on the ground avenue of approach. The art in constructing a survivability position blends terrain with the enemy's ability to maneuver.

Constructing a fighting position must be second nature to a Stinger or Avenger team. When a team moves into their position, they must ready their weapon for action, establish local security and communication and a myriad of other tasks. But all may be for naught if they don't dig their hasty fighting position. This conditioned response begins with home-station training, not at JRTC or on a real-world deployment. Fighting positions protect against direct and indirect fire. Sturdy construction provides cover. Positioning and proper camouflage provide concealment. The enemy must not be able to identify a position until too late. That gives the friendly unit the initiative to engage and neutralize the threat. Digging a position easily spotted from 100 meters away negates that advantage. Worse, it warns the enemy.

Proper cover and concealment are maintained by preparing positions in stages. The most important step in building a fighting position is making it invisible. To do that, soldiers should always:

● Understand the time necessary to construct the position; when do you expect the enemy to attack?
METT-T.

- Choose the fighting position carefully; analyze OCOKA and how the enemy will maneuver.
- Ensure the position offers good fields of fire.
- Maintain security and communications.
- Dig the position armpit deep to the tallest man.
- Fill sandbags about 75-percent full.
- Ensure the position has 18" of overhead cover.
- Check stabilization of wall bases.
- Clear fields of fire.
- Look from the enemy's view to ensure you are properly camouflaged.
- Take advantage of the natural cover and concealment.
- Orient the fighting position on the ground avenue of approach.
- When possible, have leaders inspect positions to ensure the standard is met.



Fighting positions are built in stages; therefore, platoon leaders can inspect them at each step before moving on. Air Defenders do not always have that luxury. That means the team chief must ensure it meets the standard. The following stages are merely a guide extracted from **FM 7-8, Infantry Rifle Platoon and Squad**. Stinger and Avenger teams must modify their position based on the Handheld Terminal Unit (HTU), the firing position, the Remote Control Unit (RCU), and METT-T.

Stage 1: The leader/TC checks the fields of fire from the prone position and has the gunner emplace sector stakes.

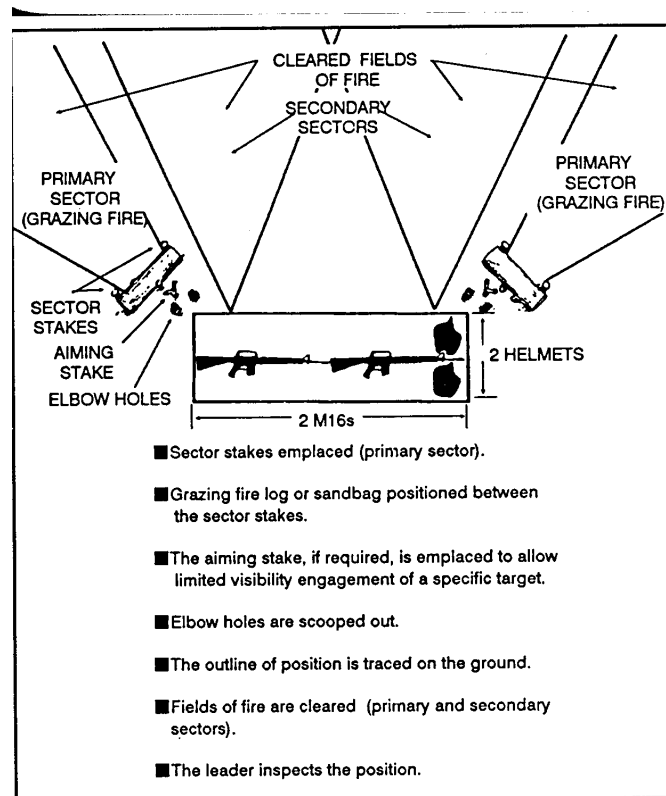
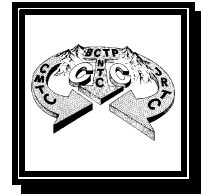


Figure 2-44. Stage 1, preparations of a fighting position.

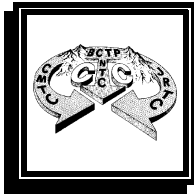
Figure 2-44, FM 7-8: Stage 1, Preparation of a Fighting Position.



The diagram illustrates a trench defense position. At the top is the **FRONT WALL**, labeled "Two sandbags high by two M16s". It shows two M16 rifles positioned behind a wall of two sandbags high. Below this is a central trench area containing two M16 rifles. A **HELMET** is shown above the trench. On the left and right sides are **FLANK WALL**s, each labeled "Two sandbags high by one M16 long". They show one M16 rifle positioned behind a wall of two sandbags high. At the bottom is the **REAR WALL**, labeled "One sandbag high by one M16 long", showing one M16 rifle positioned behind a wall of one sandbag high.

- The front wall is two to three sandbags (or logs) high. For a two-soldier position, it is about two M16s long.
- The flank walls are the same height, but only one M16 long.
- The rear wall is one sandbag high by one M16 long.
- If logs are used, they must be held firmly in place with strong stakes about 2 inches to 3 inches in diameter and 18 inches long.
- The leader inspects the position.

Figure 2-45, FM 7-8: Stage 2, Preparation of a Fighting Position.



Stage 3: During stage 3, the position is dug and the dirt is thrown forward of the parapet retaining walls and then packed down hard.

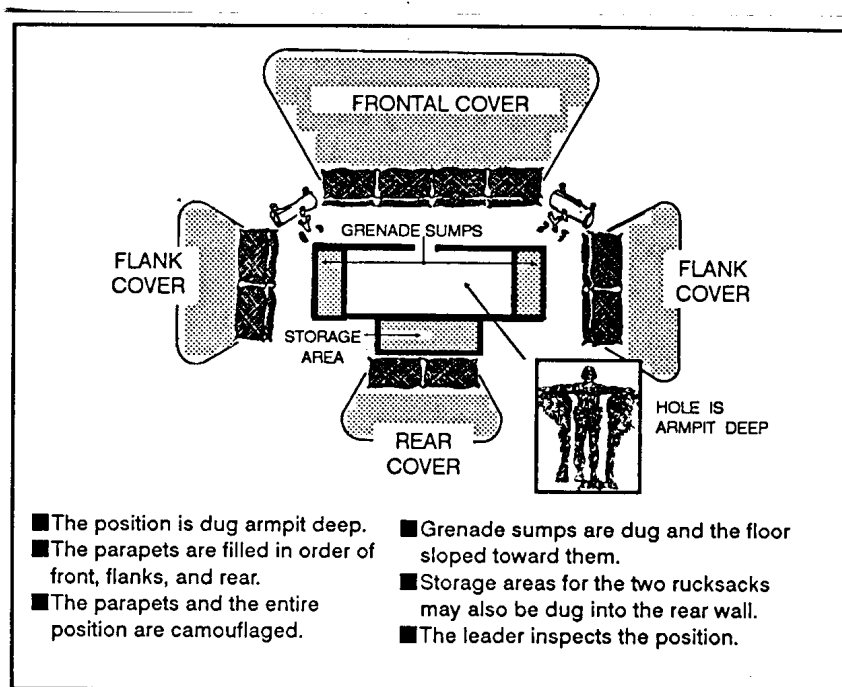


Figure 2-46. Stage 3, preparation of fighting position.

Figure 2-46, FM 7-8: Stage 3, Preparation of a Fighting Position.



Stage 4: The overhead cover is prepared. Camouflage should blend with surrounding terrain. At a distance of 35 meters, the position should not be detectable.

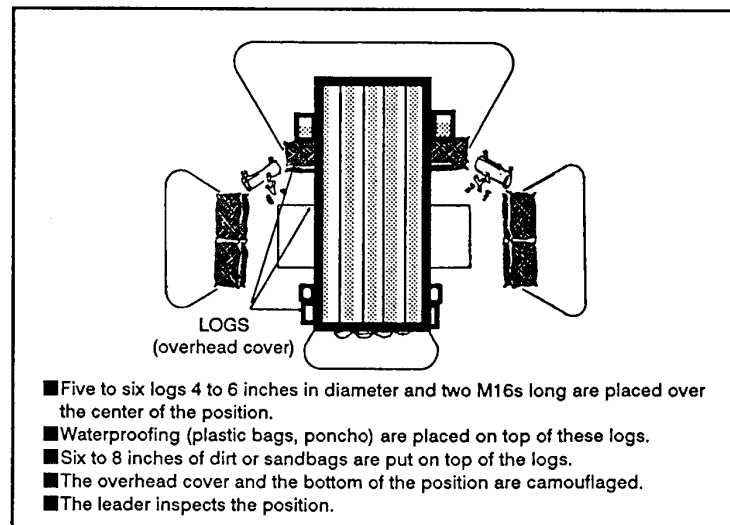
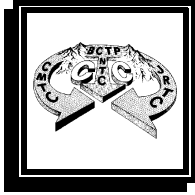


Figure 2-47. Stage 4, preparation of a fighting position.

Figure 2-47, FM 7-8: Stage 4, Preparation of a Fighting Position.

The final step is the location and construction of the missile firing position. Most unit SOPs cover how the firing position should be constructed. The position requires at least two hasty fighting positions to protect the position from direct fire. The missiles should have at least a shallow position to provide them protection from direct fire. This allows them to stay low and pop up just prior to an aircraft entering their area of operation. If missiles are stored at the firing position, they require cover and concealment. This method allows teams to “low” or “high” crawl to the firing position, staying out of the sight of the enemy. Many Stinger teams run with missiles to their firing and fighting positions. That compromises the positions and chances damaging the missiles before they are fired.

In summary, METT-T should determine how units operate in the field. The best intelligence in the world is useless if it is ignored. The most sturdily constructed firing position may cause the destruction of a unit if it is in the wrong place or if it is poorly concealed. The indirect fire threat at JRTC is well documented, driven by the real world effects of such weapons. Yet ADA teams often ignore METT-T and their unit’s SOPs. They fail to dig in properly, due to poor leadership or poor training. Either way, they often end up dead. We offer some proven techniques to consider when conducting operations in a hostile environment. Remember, constructing a fighting position is an art form that can save lives. If not used, teams will neither survive the battle nor accomplish their mission.✪



Aviation Company Command Posts: Nerve Center *or* Black Hole?

by CPT Michael Bentley, JRTC Ops Group Senior Aviation Planner

Returning to the Brigade Support Area from a 0600 resupply mission, aircraft Viking 648 receives a follow-on mission from the Battalion TOC. “648, Go to grid VQ12345678 and pick up four casualties and transport them to the CSH.” “648, Roger, does Viking CP (648’s company headquarters) know about the change in mission?” “Negative, Viking CP cannot be reached on landline or radio. Can you attempt to raise them on the radio?” “Roger, break, Viking CP, this is Viking 648.” “Viking CP, this is Viking 648.” After three attempts, the crew gives up and departs on the mission. Halfway to the CSH, an SA-18 shoots Viking 648 out of the sky before the crew can get a mayday call off. Three hours later, the battalion and Viking command post (CP) have no idea they have lost an aircraft and crew.

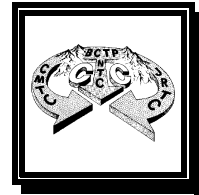
Sound familiar? If you have been through JRTC, it should be. During the past six rotations at the Joint Readiness Training Center (JRTC), two of the eight company command posts tracked by Observer/Controllers (O/Cs) were functional. This article will discuss the setup, manning and information management functions of the Aviation Company CP.

Setup

The simple layout of the CP affects greatly how a CP functions, both good and bad. “Where are the mission brief sheets?” or “Where is the logbook for 648?” or “Where is the ACO?” are questions heard too many times at the JRTC. Time is a precious resource ill spent on such routine concerns. The tactics, techniques and procedures (TTP) -- there is no approved technique on how a CP should be configured. Rather, the commander with the first sergeant and company leadership must decide -- through trial and error or collective experience -- how the CP can best support the unit. Once the command team determines what works best, that knowledge must be incorporated into a unit standing operating procedure (SOP). There are three observed keys to success in Company CP operations.

1. **Organization.** Develop a place for everything. The arms room, Aviation Mission Planning System (AMPS), maps, charts, radios and all accompanying equipment should have a place in the CP. Remember this key phrase, “A place for everything and everything in its place.”

2. **Functional to the unit.** Company sections need operation areas just like the battalion staff in the tactical operations center (TOC). There should be an area for the crew chiefs to close out logbooks, an area for mission planning, and an area for the radio telephone operator (RTO). This last point involves “other” activities that routinely occur in the CP. The CP is NOT an area for card playing, eating or congregating. There are tents that are available for these other activities. The CP OIC and NCOIC are the commander’s CP “guard dogs” armed with sufficient “bite” to enforce his policies. All in the unit must understand they serve in the commander’s name.



3. **Planning and briefing.** Crews need space for planning and briefing. The operative consideration in providing that space is separation. The preferred method is separate planning and briefing areas. If separate planning and briefing spaces are not possible, they should at least be separate from the operations area. The last thing a company needs are briefings with half the crews outside the tent trying to listen in and the other half crowded in on top of crews still engaged in planning inside an operations area.

Manning

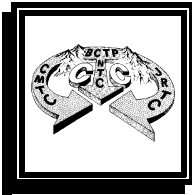
Manning is critical to successful CP functions. The CP is the command and control hub for the unit, the mission-planning center, missions tracking, arms storage, and logbook maintenance. Even the best-organized CP will fail if manned improperly by soldiers not prepared for the job. Inexperienced warrant officers, inexperienced lieutenants or junior crew chiefs are not the ones to do these tasks. Nevertheless, units consistently place new warrant officers or new lieutenants as CP OICs and our RL III crew chiefs as CP RTO. Six of the eight CPs had one of the above in place at any given time during their rotations. Although training on CP functions and operations would help, most of the time, green soldiers are handed the supervision of the central nervous system of the aviation company. They barely understand their own job. They are hardly ready for CP duty.

TTP: So how does a commander staff his CP when there are barely enough crews to fly the company helicopters? First he should announce early in the planning cycle (pre-deployment) that the CP is going to be staffed by trained, experienced soldiers who can function effectively as a team. One solution is to rotate the duty everyday between the platoons so that every third day each platoon leader has to provide an OIC and RTO for the CP. Not only does this give the platoon leader plenty of time to determine which crew he is going to use based on the commander's guidance, but it also puts some of the ownership of the CP on the platoon leader's shoulders. With this technique, the CP has an OIC and an RTO for each 12-hour shift and only one crew is down at any given time.

Information Management Functions

Doctrine hardly addresses TOC functions for a battalion; there is even less discussion of CP functions in an aviation company. Nevertheless, one can use the functions of a TOC and refine them for company use. Every member of the CP must understand those functions. Moreover, they must grasp how, individually and collectively, they contribute to the CP's success -- or its failure. There are four basic functions of the command post that everyone should understand: receive information; distribute information; analyze information; and submit recommendations to the commander. Although simple tasks to state and perform individually, they rarely happen singly. More commonly, they are interwoven simultaneously, and therein lays the art of an effective command post team.

1. **Receive information.** The first part of information management is to ensure that information is received and recorded accurately. The CP receives a large volume of information from a variety of sources ranging from higher headquarters to aircrews on missions. Out of the eight CPs observed at the JRTC, only three used the DA Form 1348 to log information. **Only one recorded the information correctly.** The other two either did not enter data correctly or did not properly fill out the log (no times annotated, erratic or illegible information entered). The soldiers in the CP must monitor all communication sources and **record** information that is delivered.



TTP: A suggested TTP is to copy the information coming in on a notebook and read it back to the source before transcribing any information on the DA Form 1348. Do not let the source go until the information is fully understood. This is an old technique. It is old because it has been tried many times and it works. Remember you are going to be the one to relay the mission to the commander and the crew. Speed remains important but accuracy is paramount. Example:

“Viking CP, this is Eagle 3 with an air mission request, over.”

“Eagle 3, this is Viking CP. Send mission, over.”

“Mission is one sling of CL V for Bulldog 3 from VQ123456 to WQ123456. Contact Bulldog on FH222 inbound. PZ and LZ are marked with a VS-17 panel, over.”

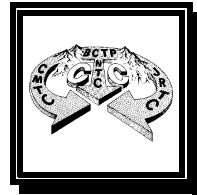
“Roger. Eagle 3, understand mission is one sling of CL V for Bulldog 3 from VQ123456 to WQ123456. Contact Bulldog on FH222 inbound. PZ and LZ are marked with a VS-17 panel, over.”

“Viking CP, this is Eagle 3. Affirmative, out.”

With the readback complete, the person that received the information is ready to distribute the information and fill out the log sheet. They should enter the time the mission was received and from whom the mission came. What they log should mirror the readback, eliminating any chance of error and misinterpretation. Lastly, they should enter the action taken, such as notifying the mission crew to include the crew chiefs, informing the commander and logging the action with their initials. The initials are important in case there is a question on the details of the mission later.

2. Distribute information. The commander must provide guidance on his information needs. While it remains true that the commander must know everything that is going on in his unit, some information requires immediate attention. Again, it is useful to refine TTPs used at battalion level for company operations. The battalion commander uses his Commander’s Critical Information Requirements (CCIRs) to identify those needs. Everyone in the TOC should know those CCIRs and inform the battalion commander if one is met.

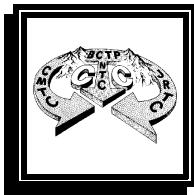
TTP: Company commanders rarely publish their own CCIR for their units, but they should consider doing so. CCIRs at company level let the CP OIC/NCOIC know what is important without need for further debate. Again, it helps to oil the machine and have a smooth running CP. Here are two scenarios for distributing information to company personnel. The first scenario is time-critical information (change to mission, new mission or enemy in the assembly area). In this scenario, the functions work simultaneously. Remember, ***never distribute information that is not confirmed, and never present half the information to the commander.***



Time Critical

Receive Information	Distribute Information
<i>"Viking CP, this is Eagle 3 with an air mission request, over."</i>	
<i>"Mission is emergency resupply of one sling of CL V for Bulldog 3 from VQ123456 to WQ123456. Contact Bulldog on FH222 inbound. PZ and LZ are marked with a VS-17 panel, over."</i>	
	Start necessary movement to notify commander or platoon leader and the mission crew. Notification may be through runner or radio.
<i>"Roger, Eagle 3 understands mission is one sling of CL V for Bulldog 3 from VQ123456 to WQ123456. Contact Bulldog on FH222 inbound. PZ and LZ are marked with a VS-17 panel, over."</i>	Readback confirmed.
Commander arrives in CP with mission crew.	Commander and crew briefed on mission by OIC/NCOIC. Commander briefs crew for mission and crew departs the CP.
Aircraft departs on mission.	Person receiving mission logs data on DA Form 1348 and initials, completing the action.

In the above scenario, the two functions, receiving and distributing information, occurred simultaneously because of the time-critical mission. In the next scenario, time is not a factor so we complete the DA Form 1348 before completing another action.



Time not Critical

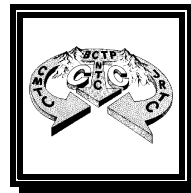
Receive Information	Distribute Information
<p>"Viking CP, this is Eagle 71, over."</p> <p>"Eagle 71, this is Viking CP. Go ahead, over."</p>	
<p>"Viking CP, this is Eagle 71. Inform Viking 6 that the commander's update brief has been changed from 1900 to 2000, over."</p>	Information entered on notebook pad.
<p>"Eagle 71, inform Viking 6 that the commander's update brief has been changed from 1900 to 2000, over."</p>	Readback complete.
<p>"Viking CP, this is Eagle 71. Roger, out."</p>	Because it is only 1300 and the commander does not come up until 1400, you enter the information on the DA Form 1348 and initial, completing the action.
	Viking 6 arrives in CP at 1430 and receives update brief which includes time change on the commander's update brief.

In the second scenario, the information is not time critical and there is no need to alert the commander immediately. When the commander arrives in the CP, he should be updated. If the mission moves and is earlier than expected, then the scenario may become time critical. By understanding the commander's intent, CCIR, whether or not the information is time critical, the OIC/NCOIC can run the CP effectively.

3. **Analyze Information.** Given that the CP is the command and control hub for the unit, all information must be kept current. If that sounds like a sound grasp of the obvious, consider that during a recent rotation at JRTC in a 48-hour period, one CP never posted the enemy or friendly graphics. The reason stated by the OIC was, "The situation is changing constantly and I would have to update the map all the time." The OIC/NCOIC of the CP has the most important job in the company. Crews come to the CP expecting current information that may affect their mission. Enemy and friendly graphics affect all and must be kept as current as the battalion's graphics.

TTP: One technique to do this is to send someone to the battalion TOC and receive updates every three hours. If three hours does not work, then every six hours, at a minimum, send someone to receive the update. Once the updates are received in the CP, they must be analyzed and changes posted to the graphics. Do not forget to log the action. If the graphics have not changed, post "No change as of xxxx."

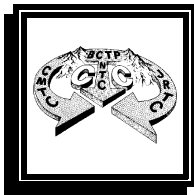
The Airspace Coordination Order (ACO) is another piece of information that is essential. Published daily at the JRTC, the ACO is usually effective at 0600. The ACO lists all active ranges, restricted operating zones (ROZs), active air corridors and downed aircrew recovery points that are active.



TTP: When the ACO is published, the OIC/NCOIC must annotate changes, effective ROZs, and other data on the A²C² overlay or map. If there are no changes to the ACO, then post “No change to the ACO as of xxxx.” Once the changes have been posted on the map or overlay, post the ACO where crews can read and log the action. Here again is the time-critical scenario with column added to see how the information was analyzed.

Time Critical

Receive Information	Distribute Information	Analyze Information
Enemy and Friendly graphics received in the CP at 0500. ACO received at 0530.		OIC/NCOIC analyze the information and notice changes to the enemy graphics and of Bulldog elements. ACO changes active DARP to “G” for the next 24-hour period. Changes posted and logged.
<i>“Viking CP, this is Eagle 3 with an air mission request, over.”</i>		
<i>“Mission is one sling of CL V for Bulldog 3 from VQ123456 to WQ123456. Contact Bulldog on FH222 inbound. PZ and LZ are marked with a VS-17 panel.”</i>		
	Start necessary movement to notify commander or platoon leader and the mission crew. Notification may be through runner or radio.	
<i>“Roger Eagle 3, understand mission is one sling of CL V for Bulldog 3 from VQ123456 to WQ123456. Contact Bulldog on FH222 inbound. PZ and LZ are marked with a VS-17 panel, over.”</i>	Readback confirmed.	
Commander arrives in CP with mission crew.	Commander and crew briefed on mission by OIC/NCOIC. Commander briefs crew for mission and crew departs the CP.	PIC updates maps and confirms location of Bulldog elements as well as the enemy situation. PIC confirms changes to ACO and briefs crew on the change to the DARP.
	Person receiving mission logs data on DA Form 1348 and initials, completing the action.	
Aircraft departs on mission.		

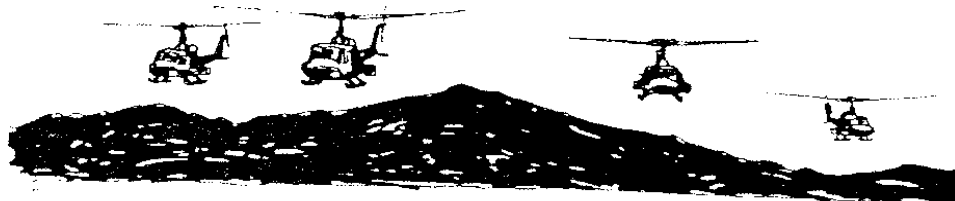


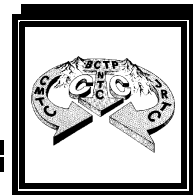
Because the information was current, the crew was able to depart rapidly and the mission succeeded. That might not have been the case if the crew had not received the change to the downed aircrew pickup point (DAPP) as published in the ACO or the enemy situation. Time and time again at the JRTC, crews depart the CP without current enemy graphics or changes to the ACO. They will be shot down by a SA-18 position that the battalion knew about, but the company did not have plotted on the map. Once the crew is on the ground, they proceed to a downed aircrew rally point (DARP) that is not active because they did not have the DARP changes from the ACO. The ultimate test of a CP is how well-informed aircrews are when they launch on a mission. It is, therefore, essential that the CP staff have the most current and most accurate information available. Equally imperative is that the information is easy for aircrews to use. That means making sure graphics are easy to read, ACO information is simple to understand and charts or kneeboard products are legible and accessible.

4. ***Submit recommendations to the commander.*** Earlier, we discussed CCIRs and the idea of publishing them at company level for better understanding. The same is true with the commander's intent. For all to understand the commander's intent, he must publish it. Often at a battalion-level TOC, the commander's intent is on a chart or butcher board, seen by all. A company commander, however, rarely publishes his intent unless there is a mission for him to publish an order. That does not have to be the case. For example, the commander might decide that after mission support, force protection is the focus. The CP establishes specific force protection tasks and posts them in the TOC. Force protection improvement is the commander's intent. The CP OIC/NCOIC and unit leaders now know the commander's focus and take action accordingly.

Conclusions

Aviation Company command posts tend to be weak in units that deploy to the JRTC. The answer is to get back to the basics. Command Posts in aviation companies have operational responsibilities that literally cover hundreds of miles. They are literally the nerve center that connects these far-flung operational assets with the commander's brain. That means they have to be functionally laid out to allow for current operations, planning, and briefings to occur simultaneously. They need to be manned by experienced aviation soldiers trained and tested in staff functions. CP duty is not the place to familiarize green soldiers with field operations, especially at the JRTC. Commanders and their first sergeants need to develop CP SOPs and conduct home-station training with their units to ensure that every member of the company understands his role when his number is called for CP duty. Your unit -- especially your fellow aviator -- is counting on it.☘





COMMUNICATIONS: The *CRITICAL LINK* for the Maintenance Control Section

by CPT Peter J. Ramirez, Maint Co O/C, NTC, and CPT Brandon Grubbs, Bde Maint O/C, NTC

FM 9-43-1, *Maintenance Operations and Procedures*, challenges the maintenance manager to strive for ways to continuously improve their operations. “Managers must also look for ways to be proactive (influencing events before they happen) rather than reactive (reacting to events as they happen).” To do this, they must have information and be situationally aware. The linch pin for situational awareness is communications.

Maintenance management at the company level is a seven-step process consisting of the following:

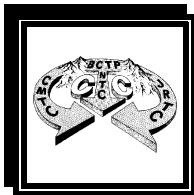
- Step 1 - Leadership**
- Step 2 - Production Control**
- Step 3 - Work Simplification and Measurement**
- Step 4 - Total Quality Management**
- Step 5 - Quality Assurance**
- Step 6 - Workload Analysis**
- Step 7 - Motivation**



In addition to these seven steps, there are other factors, such as technical skills, command emphasis, and resources, that could affect the mission. However, the Maintenance Control Officer (MCO), the Maintenance Control Supervisor (MCS), and their crew are the transition point where key maintenance leaders make the critical link between organizational and direct support maintenance. When deployed or in garrison, the shop office can meet the steps of maintenance management through planning, training, and a rehearsed communications plan which facilitates the building of combat power.

Let us take a look at a high performance-deployed maintenance company before a mission. In two days, the 1st Brigade Combat Team (BCT) attacks the enemy to protect the left flank of the 40th Division.

- | | |
|-------------|---|
| 0600 | The shop office is receiving maintenance disks from the brigade (BDE). Over the FM net, the Maintenance Control System (MCS) is receiving updates from the Maintenance Support Teams (MSTs). The base maintenance shops are just completing stand-to procedures. |
| 0630 | The shop stock clerk goes to the Technical Supply Office (TSO) to pick up repair parts, and at 0730, the Shop Officer meets with the base shop NCOICs for updates. The base shop NCOICs are required to update a minimum of twice a day because of the increased OPTEMPO on deployments. |
| 0900 | The Support Operations Maintenance NCO comes to the shop office to pick up the SAMS1 to SAMS2 Inop transfer for the 1300 BDE maintenance meeting. The shop officer goes to brief the company commander on the company workload and the status of the MSTs. The Armor MST |



transfers a M2 (BFV) engine to the Infantry MST. However, right now in the brigade support area (BSA), the maintenance support battalion (MSB) is delivering Class IX parts to the transportation support officer (TSO), and the delivery contains a significant number of 02 priority parts to build combat power. Because of their foresight and their ability to execute a plan, the shop office has a 5-ton cargo truck and a HMMWV at the TSO.

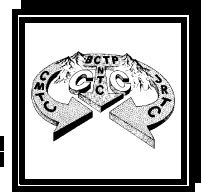
- 0930** **The TSO transloads the parts to the awaiting truck, processes the parts, and releases them to the shop stock clerk.**
- 1000** **The 1SG gives the “Renegade Express” NCO the PMCS, administrative paperwork, and mail for the MST.** The shop office operates their own Renegade Express (an internal DS “redball”) to expediently deliver repair parts forward.
- 1300** **The shop officer briefs at the BDE maintenance meeting.**
- 1400** **The trucks return to the BSA loaded with unserviceable Class IX repair parts.**

QUESTIONS:

1. How did the shop office accomplish all of this while maintaining situational awareness?
2. How can the Forward Support Maintenance Company manage to keep the MST chiefs forward where they affect maintenance with their task forces?
3. Why was the maintenance control section able to maintain accountability of major assemblies and unserviceable recoverables?
4. How could the shop officer brief the company commander and be confident enough to brief at the BDE maintenance meeting when he hadn't seen anyone from the MSTs where the preponderance of the combat power was being fixed?
5. How could the Shop Section Summary Report AHN-006 be accurate?
6. How did the shop office know that they had parts on that push from the MSB?

THE TECHNIQUES USED:

Commanders and leaders (**Step 1, Leadership**) are responsible for training their soldiers to achieve the desired standard -- a maintenance principle. A battle drill for the shop office and MSTs, no matter how close the MST establishes to the BSA, is to set up their OE-254 antenna. Their pre-combat inspections (PCIs) and rehearsals before and during reception into the theater paid dividends. As a result of the discipline to set up the antenna and monitor the net, the MSTs relayed information from MST to MST to shop office. In essence, the maintenance company established their own communications network on the battlefield. The communications network could also be exploited by the FSB Commander with clear and rehearsed CCIRs. Furthermore, the shop office priorities of work in the defense not only included their OE-254 Antenna but the wire to the company CP and especially the DNVT/MSE connectivity.



Production control (Step 2) entails proper routing of work and attainment of maximum production by keeping all shop elements working.

Prior to deployment to the theater, the commander and the shop office addressed **work simplification and measurement (Step 3)** by looking at historical records. This gave them a start point from which to adjust when they arrived in theater according to their unit's needs and different missions. Further, it gave them a start-point for the numbers of parts and major assemblies they would be consuming. Internally, the shop office posted their battle rhythm, from filling up the generators to running the 006 Print. At any time, the shop soldiers knew what critical tasks had to be accomplished and why and when these tasks were supposed to be accomplished.

The Shop Officer and the MCS addressed **total quality management and quality assurance (Step 4 and Step 5)** with the section NCOs, shop NCOICs, and the MST NCOs prior to deployment. Furthermore, they emphasized this at the daily 0800 shop meetings and through the use of the "Renegade MST Update." The MCS and Shop Officer visits to the MSTs and interface with the TF BMOs and BMTs ensures end user input. In addition, the NCO's PCI checklist ensures proper tools, slings, and technical manuals are on hand.

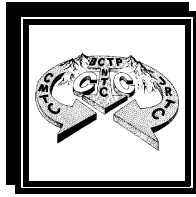
The Shop Officer monitors the daily workload (**Step 6, Workload Analysis**) of each section using SAMS-1 Reports such as the 01 and 22 Print. This provides the Shop Officer a snapshot of the backlog and he can determine if a section is overloaded or will have to shift assets to complete the defense mission. Finally, he can get a picture of the MST workload, which allows him to make an informed decision on where to refocus efforts using the BDE priorities of maintenance.

The "Renegade Express" was a motivating factor (**Step 7, Motivation**) to the MSTs, not only because it brought mail and company updates, but because the distribution and communications system worked as planned and rehearsed. Furthermore, with the Renegade Express, they achieved proper movement economies. The MSTs gained confidence in the training, leadership, and systems. As a result, the Shop Officer was able to fix forward.

The ability to have consistent and dependable FM communications is not the sole reason behind the successes of the Maintenance Company; however, it is the critical conduit for the shop office to run their Renegade MST Update. The Renegade MST Update followed sound maintenance processes as described in FM 9-43-1, Chapter 4-3. This is a sample format that each MST used to provide their updates to shop office IAW their battle rhythm and BDE maintenance meeting timeline:

Renegade MST Update

1. Maintenance Issues.
 - a. Working jobs.
 - (1) Estimated completion date/time of job.
 - (2) New work order call-ins.
 - b. Completed jobs.
 - c. Suspected jobs/technical assistance provided.
2. Shop Stock, Bench Stock, and Critical Class IX update (e.g., push packet).
3. Unserviceable major assemblies and grid location.
4. Team risk assessment, to include tactical and accidental (operational and environmental) hazards.



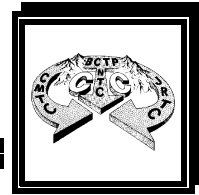
5. PMCS status of MST equipment.
6. Current threat condition.
7. Anticipated threat condition.
8. Anticipated jump:
 - a. Time.
 - b. Grid.
 - c. Equipment/left behind.
9. Sensitive items update per unit TACSOP.
10. Other issues.

Their FM work order requests that could and should be called in at any time used a format that mirrored the work order screen on SAMS-1:

- LINE 1: Job order number.
- LINE 2: Customer UIC.
- LINE 3: Shop section code.
- LINE 4: Equipment NSN.
- LINE 5: Organization WON.
- LINE 6: Serial number.
- LINE 7: Quantity.
- LINE 8: Priority designator code.
- LINE 9: Malfunction.
- LINE 10: Mileage.
- LINE 11: Bumper number.
- LINE 12: Work order status.
- LINE 13: NSN of part being ordered.
- LINE 14: Quantity of parts required.

The ability of the shop office to receive information and have tracking systems to act on the information given allowed them to leverage the communications medium to their advantage. An effective communications medium (SINCGARS) allows the shop office to receive information in a timely and accurate manner, resulting in the building of combat power for the BCT. When the Armor MST transferred the M2 (BFV) engine to the Infantry MST, the shop office monitored the conversation, came on the net, acknowledged the transfer, and recorded it on the tracking chart. Furthermore, they requisitioned another engine and *expected* the Renegade Express to pick up the unserviceable one. The proactive shop office reduces maintenance downtime and utilizes transportation to the fullest. Lastly, the proactive shop office coordinates with the Support Operations Maintenance Officer to gain visibility of critical Class IX parts being delivered by the MSB and when.

In summary, the shop officer must use every available means to complete the mission of building combat power. In addition, the shop officer must think outside of the box and develop innovative ways to enhance support to their customer units. A job is either being worked or it is awaiting parts. If it is awaiting parts, be pro-active in getting the parts, tracking the parts, and moving the parts. A well-rehearsed communications plan and system will solve problems and allow the Maintenance Company to be the combat multiplier they are designed to be. ☘



SKILLS AND DEVELOPMENT OF THE BATTLE STAFF

by CPT Scott Hussey, Timberwolf 15, CMTc

“A good staff has the advantage of being more lasting than the genius of a single man.”

Jomini, *The Art of War*

INTRODUCTION

As an Observer/a Controller (O/C), I have had the opportunity to observe many task force staffs struggle with the Military Decision-Making Process (MDMP). I have also watched numerous staffs working at different levels of ability. Often, when a task force staff would bust its timeline and I would have time to spend standing in the TOC, I would ask myself, “Why did this happen?” and “How can I prevent it from happening to the next unit -- or even to myself some time in the future?” It was often puzzling to see good men trying hard. They were slaving away, but were still unable to produce a quality operations order or a synchronized task force-level plan. As my skills as an O/C improved, I began to notice key indicators about a task force staff. This article was meant for battle staff officers and those who train battle staffs, whether at home station, in simulations or in the maneuver boxes over the world.

THE PROGRESS OF STAFF LEARNING vs THE PROCESS OF MILITARY DECISION MAKING

Staff officers and staffs have to develop three basic skills when working with the MDMP. Their individual proficiency in these skills determines the overall level of the collective staff. Hence, both the battle staff and the battle staff officer traverse three stages of proficiency. The stages are named after the three basic skills (Figure 1) the battle staff must be able to perform. They are *planning*, *producing*, and *synchronizing*.

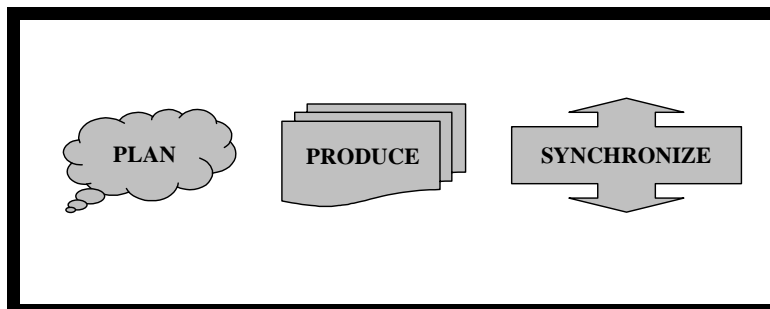
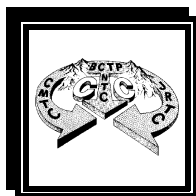


Figure 1. The Basic Staff Skills



These skills are usually learned and mastered in logical order. That is, plan, produce, then synchronize. But, when you compare the order for learning the basic skills with the order of the steps in the MDMP (Figure 2), it is apparent that the progress of the staff and the process of the staff are not in the same sequence. It is this conflict between the *order of progress* and the *order of process* that distracts the staff from proper synchronization.

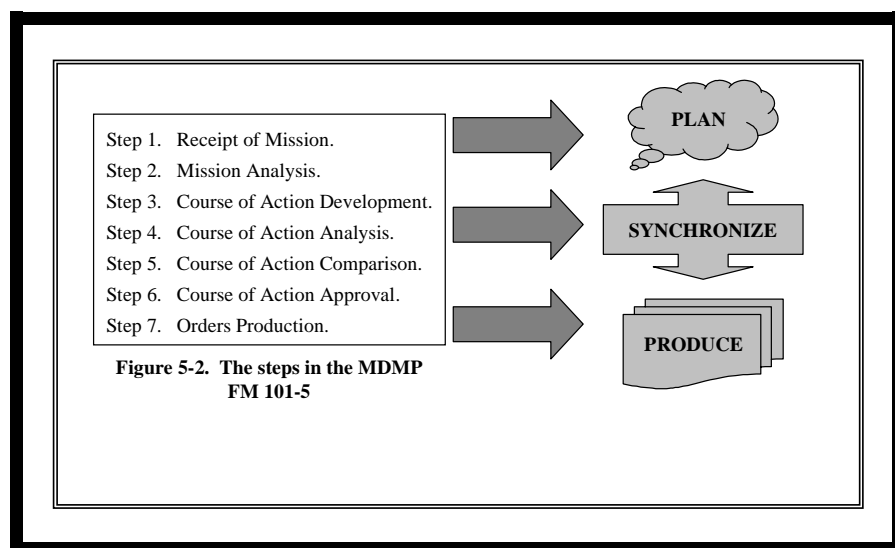
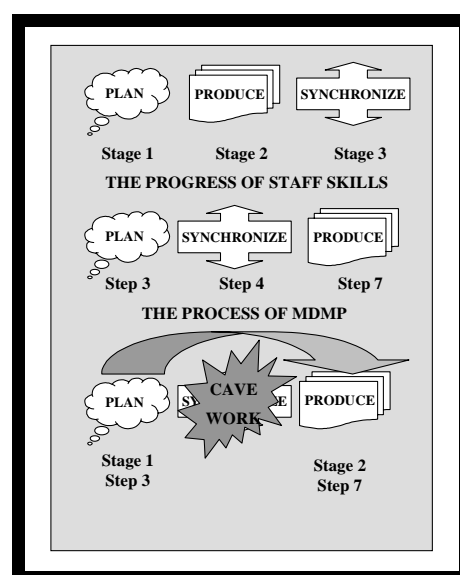
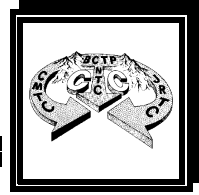


Figure 2. The Broad Strokes of the MDMP

Commanders who give the staff a single, directed course of action allow the staff to save time by skipping Step 5 of the MDMP (Figure 2). Staffs with weak synchronization skills and long production times usually sacrifice Step 4. A staff that is comfortable with its product, yet uncomfortable with its wargaming skills, manages the timeline by crashing the analysis portion of the process. With the majority of the staff weak on synchronization or unable to create the necessary products needed for analysis, individual staff sections will focus on their own particular annex or paragraph to the order in their separate cells. Rather than spending the remaining time synchronizing the plan, the staff jumps immediately to orders production (Figure 3).

Figure 3. Jumping the Process for the Product.





This phenomenon is known on my O/C team as “Clan of the Cave Bear” staff work. The staff develops a course of action and then proceeds straight to production, never working together to synchronize their work. The battle staff will work very diligently for several hours on their laptops, never to be seen by other staff officers, until the executive officer yells “I need your part of the order!” Staff sections leave their caves, diskette in hand to give their offering to the chieftain. The staff’s priority is on the physical production of the order, yet the focus of the MDMP is to produce a *synchronized* plan.

THE LEARNING CURVE OF STAFF SKILLS

Figure 4 shows the learning curves of the three battle staff skills in comparison to each other. The initial skills developed by the battle staff are planning and producing (area A).

The learning curve for both of these skills is initially steep. The development of production skills is secondary, although it is directly related to the battle staff planning skill. For example, although novice staff officers are familiar with products, such as the Warning Orders that are used throughout the planning process, they have to learn how to develop them and how to use them properly. To know how to build products and apply them properly, staff officers must first learn the planning process. Most battle staff officers pick up these skills quickly and easily, and, as a result, most staffs exist in Stage Two (page 29, Production).

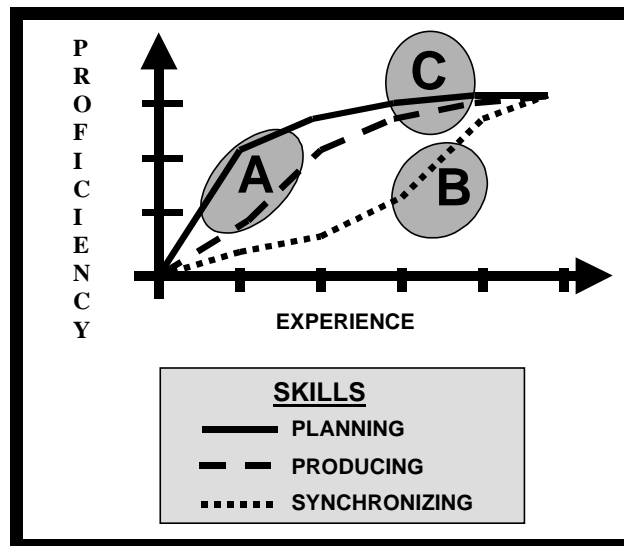
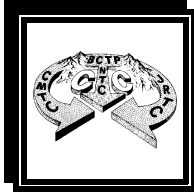


Figure 4. The Learning Curves of Staff Skills



The skill of synchronization is an advanced skill. It cannot be sufficiently developed (area B) until the battle staff is proficient in both planning and production (area C). The following example further illustrates this point: People learning to operate a vehicle do not usually drive smoothly. The driver focuses on what is occurring just over the hood of the vehicle. The vehicle bounces from one side of the lane to the other because the driver is oversteering and is overwhelmed.

He becomes uncomfortable with vehicles waiting to pass so he pulls over and lets more experienced drivers go around him. Hands grip the steering wheel tightly and heart rates increase as vehicles in the oncoming lanes whiz by. A novice driver seems to avoid accidents more out of luck than through operator skill. Eventually, the operator becomes familiar with the sensation of driving, and learns that the vehicle will stay in the lane by watching the horizon and not the hood ornament. He becomes accustomed to vehicles in his lane and in the oncoming lane. A driver begins to maneuver defensively and masters not only the vehicle but also the situation.

Staffs do the same thing. So do maneuver commanders. It happens all the time. Until a person becomes familiar with his own actions and equipment, he cannot incorporate the actions of others into his plan or course of action. Synchronization sometimes occurs by chance. It cannot occur consistently until the Subject Matter Experts (SMEs) for reconnaissance, enemy actions, direct fire, indirect fire, and obstacles become as proficient in planning and production as they are in executing their tactical tasks.

THE BATTLE STAFF DEVELOPMENT MODEL

The battle staff development model summarizes the skills, the learning curve, and the levels of proficiency observed. It is designed for every staff officer and battle staff to use. It is not an all-encompassing reference. Rather, it is a quick directory to help battle staff officers, their trainers and supervisors recognize strengths and weaknesses.

Most new staff officers start in stage one, planning, by learning the MDMP. This could prove to be a liability to the other members of the staff who are dependent on the new staff officer's production skills. These officers are competent in planning. They are working their way up in the production phase. But they can easily get hamstrung by newbies who cannot yet work at that level. Merely having a couple of officers who have mastered synchronization will not pull the whole staff into that stage. These officers know what right looks like. But they still have to be dependent on the staff as a whole to work their own way through the first two steps. Eventually, each battle staff member experiences a moment of clarity after being content with his portion of the order. He finally realizes the importance of synchronization.

STAGE ONE: LEARNING TO PLAN, PLANNING TO LEARN

This is the initial stage for most, if not all, staff officers. It is extremely rare for all the members of an entire staff to be in this phase -- unless they have not trained on the MDMP at all for a very long time. Staff officers must learn the MDMP, both formally and informally. Most basic courses do not teach the MDMP. New lieutenants should focus on being platoon leaders. Unfortunately, certain staff officers will always be lieutenants. And currently, large numbers of lieutenants are filling positions consistently and formerly held by captains -- sometimes even branch-qualified captains.

It is vital for new staff officers to quickly develop their planning and production skills.



Techniques:

1. Encourage new staff officers to give their portion of the briefing to an experienced audience. Provide them feedback.
2. Use standard briefing charts and formats with standard responses to quickly train new staff officers in the first stage.

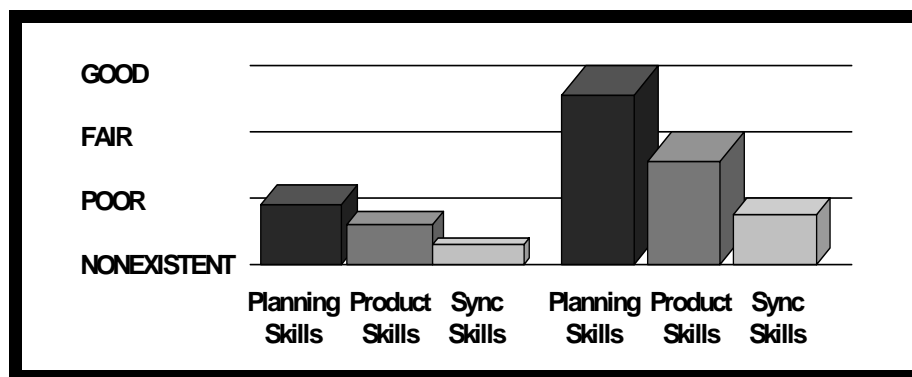
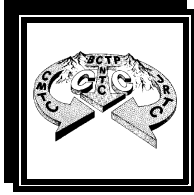


Figure 5. STAGE ONE: Learning the Planning Process

The skill that improves the most in this stage is obviously planning, although production skills also increase substantially (Figure 5). As battle staff officers become oriented to the process, certain products, such as briefing charts and cards, COA sketches, and matrixes, are frequently introduced. Stage One should not be viewed as negative for a beginning staff officer. Everyone must start somewhere, and it is best to start at the beginning. Units deploying to a CTC should work with staff personnel in Stage One and get them well into Stage Two (Production) before arrival at the training center. Officers cannot go to the next stage, production, until they are comfortable with the sequence of the MDMP and what information for which they are responsible. Officers believing they can get by with a huge historical file of old OPORDs, and cut and paste their way through the process will get crushed when it comes time for original thought. Some officers struggle hard to produce their annexes and overlays. They are more than likely stuck in Stage One.

Indicators of a staff stuck in Stage One:

- **Severely incomplete OPORD** (staff struggles to process information from higher, does not know the MDMP, or believes the MDMP does not work and does something of its own invention that eventually takes longer, and with less results, than if the MDMP is followed).
- **Poor Timeline Management** (each step of the MDMP takes *a lot* longer than planned because of inexperience).
- **Slice Elements from different installations** (staff might not yet be a team or completed any order drills).



STAGE TWO: PHYSICAL PRODUCTION STRUGGLE

With well-developed planning skills and good production skills, officers and staffs then move into the next stage, production. This is where most overall staffs can be found. Physical production of an operations order can bring a staff and unit to their knees. Most experienced staff officers know this and try not to be the one to hold things up. Although the staff's planning skills still increase during this stage, the main improvement is in production (Figure 6).

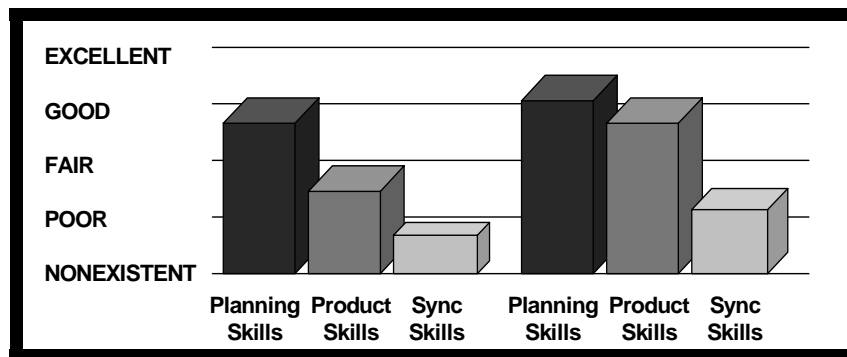


Figure 6. STAGE TWO: The Physical Production Struggle

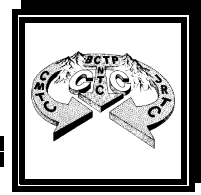
Most of the staffs that I have observed were somewhere in the production stage. They were struggling with the quality and timeliness of their task force OPORDs. Battle staffs tend to linger in the production stage for two reasons:

- **Personnel turnover.**
- **Poor wargaming skills.**

With a couple of order drills behind them, most staffs start to critique their own work and sometimes ask for help or ideas on how to improve the quality and content of their orders.

Officers and staff that have a healthy attitude in this stage normally try different formats for the order. The staff is usually able to stick to its timeline. But, they frequently sacrifice the wargaming portion of the process to manage production time. Some staffs “synchronize instead of wargame.” This is misleading because their version of synchronization does not include the enemy. The purpose and endstate of wargaming is synchronization; it can not be separated from the wargaming process. Staffs proficient in planning and production are ready to move on -- to improve their wargaming. If staffs believe wargaming is painful, try watching them instead of participating in them. Most staffs have poor wargaming skills. They typically use the belt technique. And the belt usually covers the entire area of operations. There is no focus for synchronization given, so none occurs.

Once a staff officer is very comfortable with his doctrine, the products he has to produce, the time to completion, and his planning, he will begin to notice what the other staff officers are producing and what information that they put out that pertains to his area. These are the first signs that the officer will soon move into the next stage, synchronization.



Indicators of a staff in Stage Two:

- **OPORD format different for every similar mission** (complete and timely OPORD given, yet staff not happy with contents of annexes or overlays).
- **OPORD brief time pushed back due to reproduction** (individual staff sections can produce one master copy in time; however, staff as a whole cannot work together to perform mass production).
- **Good timeline management, little or no wargaming** (staff stays on timeline by skipping the wargaming step; quickly wargames but does not use sync matrix; never mentions results of wargaming in any further steps of planning or preparation).

STAGE THREE: THE SYNC LIGHT COMES ON

Not until the entire staff can consistently produce the materials necessary for synchronization can the battle staff graduate to the third step (Figure 7). A simple check for synchronization is laying the R & S plan, target overlay, enemy event template, and the obstacle plan over the maneuver graphics. If any Clan of the Cave Bear staff work has occurred, it will be obvious by comparing the products of the individual staff officers.

Staffs that can quickly wargame different parts of the battlefield using different techniques can quickly synchronize the BOS elements. The weakness of the MDMP is the COA analysis portion. Even when wargaming is done to standard (Action-Reaction-Counteraction), it is done turn-based. This means that the enemy does not react or counteract until the friendly forces have preformed another action. **WRONG!** A unit fights in real time, not turn-based. Like boxing, not chess. If a unit can hit another three times while the other hits once, it will do so. A boxer does not wait until the opponent hits him and then return the punch. Wargaming needs to be improved across the Army. Like rehearsals, we must publish different techniques and types. We must disseminate them to improve all staffs simultaneously.

There is no endstate for this stage since staffs usually peak in this stage, and individual staff officers usually move to different positions after reaching this proficiency.

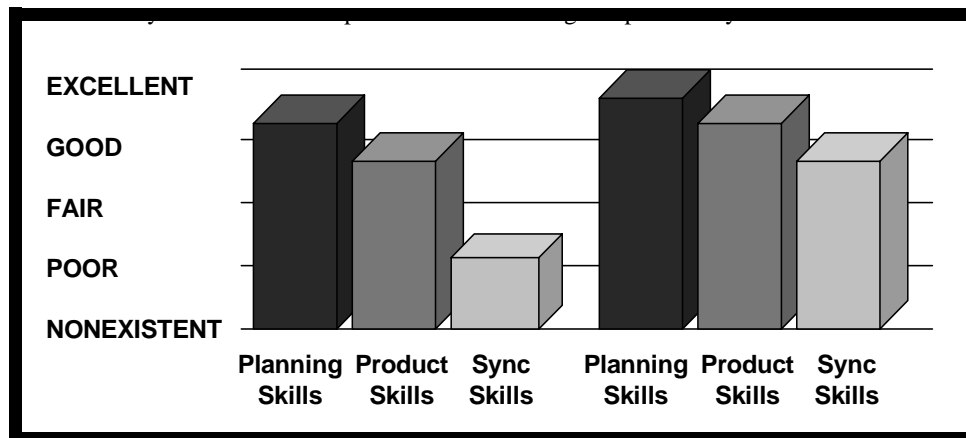
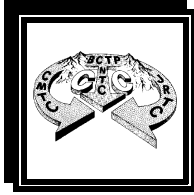


Figure 7. STAGE THREE: The Realization of Synchronization



Indicators for a staff in Stage Three:

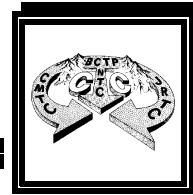
- **Good FRAGO usage** (staff mastered information processing and dissemination, good time management of 1/3-2/3 rule, parallel planning with higher and subordinate units, productive staff work).
- **Adjacent unit consideration** (staff includes COA of other units concurrently with theirs).
- **Liaison officer usage.**
- **Good wargaming skills** (at least Action-Reaction-Counteraction, using different techniques for different part of the mission).
- **DST development and decision point tactics** (dependent by design on the actions of others).
- **Comfortable with their own actions and subject area staff officers begin to learn from each other and help each other in the process.**
- **Highly organized and detailed OPORD produced quickly and with quality.**

Focus Home-Station unit training for battle staffs on these phases. The Executive Officer, as chief of staff, should be able to assess not only the overall battle staff but also each individual staff member. He should be able to categorize them by their stage of development in the learning process. Design training programs to ensure that staffs and staff officers graduate from one phase to the next. Train with a purpose and endstate for the staff officer. For example: "The purpose of this staff orders drill is to improve the staff currently within the production phase with a defensive order; endstate individual staff officers have briefed their annex content and format to the other staff officers and briefed information off of their respective MDM and OPORD briefing charts to the executive officer and S-3."



There are advantages and disadvantages to conducting the complete process every single time. Design an order drill to isolate certain staff weaknesses (wargaming, OPORD briefing, mission analysis) to train smarter, not necessarily harder. A task force staff needs an entire work day to work from receipt of the brigade order to production and briefing of an OPORD. It can sometimes be a bridge too far for staffs in garrison to consistently meet and perform complete order drills, especially in units where the task force is spread out over several installations. Focusing on particular weaknesses of a staff officer or staff as a whole takes less time and can be just as beneficial to improving the battle staff team. The battle staff skills and development model are information and time management.

With LCD XXI and the information age at hand, most staffs should not have to worry about fielding high tech equipment. They must master how to internalize information rapidly, create and disseminate information requirements up and down the chain, learn their own subjects so they can teach their fellow staff officers and learn how to glean information from each other to transition from a group of staff officers to a battle staff working together as a team.☺



The Light Infantry Chemical Officer and the National Training Center (NTC) Experience by 1LT Sean D. Lovett, Light Inf CHEMO, 172d Inf Bde, Alaska

Nuclear, Biological, Chemical (NBC) warfare is perhaps the most terrifying aspect of warfare. On emotional and intellectual levels, most people can accept casualties resulting from bullets, artillery, bombs and other forms of conventional weapons. When it comes to NBC, the same people are almost devastatingly terrified. When one is faced with something that threatens him, there are two reactions, face the danger or deny its existence, the old “fight or flight” principal. Unfortunately, in the case of the light infantry, it is more often the latter response instead of the former.

Every light infantry battalion is assigned one 74A Chemical Officer to its staff. By doctrine, the chemical officer is a special staff officer who works directly for the battalion commander. However, by practice, the Chemical Officer (CHEMO) is assigned to the office of the S3 Operations Officer. More often than not, the CHEMO becomes swamped with administrative duties and a large variety of additional duties instead of those for which he was trained. For most light infantry CHEMOs, chemical training becomes little more than a vague memory of the Chemical Officer Basic Course (COBC). NBC proves to stand for “Nobody Cares,” that is, until a rotation at the NTC begins to loom on the horizon.

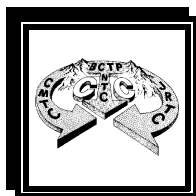
As a light infantry chemical officer in Alaska, I found myself in much the same situation as I have just described. Much of my home-station time is spent with a variety of administrative and operational projects that have absolutely nothing to do with NBC. Indeed, the only regular NBC-related duties that I have are concerned with turning in the monthly Chemical

Defense Equipment Report. This factor, combined with the extreme environmental conditions of Alaska, and the standard light infantry anti-NBC attitude served to provide little to no opportunity to hone any NBC-related skills prior to deployment to the NTC. I discovered that I would have to completely re-educate myself in the field of NBC Warfare.

When I first began my search for information concerning NBC operations in light infantry battalions at the NTC, I found few resources. Outside of occasional Tactics, Techniques, and Procedures (TTP), the few resources that I found concerned general NBC operations. None of these could be tailored to specifically aid the light infantry battalion CHEMO.

The best resource that I found in preparing for a rotation at NTC was speaking with CHEMOs that have gone through previous rotations. In most of their situations, they were each forced to create, from nothing, their own systems and solutions to the challenges posed at NTC. In each case, the systems were created just prior or during their rotation and occasionally passed to others by word of mouth.

This article provides, in written form, a starting point for the typical light infantry CHEMO to begin preparations for a rotation to NTC. The information and methods provided in this article are derived from a variety of sources including field manuals, articles, and the personal experiences of other light infantry battalion CHEMOs as well as my own. It is my hope that this article can be used as a base from which future CHEMOs learn prior mistakes and derive their own operational systems to prepare for NTC.



Common Mistakes of the Light Infantry CHEMO

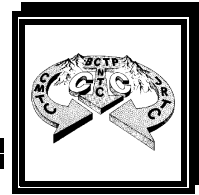
There are a variety of mistakes that light infantry CHEMOS have made in the past. Most of these mistakes are a result of a lack of experience in NBC affairs, not general incompetence. The greatest single problem facing the CHEMO is his lack of NBC training and experience. Although he has graduated COBC, the light infantry CHEMO rarely practices his profession between the basic and advanced courses. More often than not, he is confronted with a chain of command that is resistant to NBC issues and prefers to keep the CHEMO busy with non-NBC-related issues. This lack of experience serves to be the greatest contributor to common NBC mistakes.

1. **The MOPP Level.** The mission-oriented protective posture (MOPP) level is the single NBC Issue closest to the heart of the light infantryman. The average infantryman carries an average of 60 to 75 pounds of gear. A complete Individual Chemical Equipment Package (ICE Pack) weighs approximately eight and one-half pounds. When an infantryman carries 75 pounds of gear through a hot, humid environment and then is told that he must now carry, and possibly wear, his MOPP suit, he suffers what infantry officers describe as "an emotionally significant event." Many CHEMOs become enthusiastic and excited when they are finally allowed to practice their profession. As a result, many hastily prescribe an unnecessary MOPP level that places a significant burden upon the soldiers of the battalion.

When making a MOPP analysis, several factors need to be considered, such as weather, mission, transportation and most likely time of attack. Consider the expected time of a chemical attack and prescribe the MOPP level accordingly. If the mission is an attack, consider keeping the soldier no higher than MOPP 1, if necessary. Consider whether the soldiers will be carrying their rucksacks or if arrangements have been made to transport the rucksacks (rucks) by truck to relieve them of the load. Carefully take into consideration all factors before prescribing a MOPP level. Remember: *keep the infantry out of MOPP as long as possible.*

2. **NBC Downwind Hazard Prediction.** Another area in which common mistakes are made is downwind hazard prediction. Many CHEMOs fail to realize that standard downwind hazard prediction is heavily safety oriented. Although the downwind hazard distance for most attack cases is 10 kilometers, do not hastily assume that a chemical agent will spread this entire distance. Factors, such as terrain, wind speed, and, most importantly, size of the attack, greatly affect the downwind hazard prediction.





Simple Suggestions

1. **Pre-(Reception, Staging, Onward movement and Integration (RSOI) Preparations.** The following is a list of preparations that must be done prior to deploying to the National Training Center:

a. **Wipe Tests.** Ensure that all M8 Chemical Alarms and Chemical Agent Monitors are wipe-tested and that the proper documents have been filed as proof.

b. **CDE Report.** Ensure that the company NBC NCOs submit a complete Chemical Defense Equipment Report (CDE) for all NBC equipment with which their company will deploy to the NTC. Keep a copy of the company CDE for your files and make a consolidated battalion-level CDE report for use during the rotation.

c. **Minimum CDE Deployment List.** Publish a list of the minimum amounts of NBC equipment with which each company should deploy. State how many items should be taken for a specific number of soldiers and equipment, such as one roll of M9 paper per every nine soldiers or major end item. Detail the minimum number of each item with which the company will deploy and distribute a copy to the battalion commander, company commander, company XO, and company NBC NCO.

d. **NBC Tasks List.** Submit a list of NBC tasks for the companies to focus upon to the battalion commander. This task list should consist of basic NBC tasks such as MOPP gear exchange, use of M256 Kit, and use of Nerve Anti-Agent Kit. The NBC tasks should be simple and focus upon reinforcing skills learned during basic common task training.

2. **The Military Decision-Making Process (MDMP).** To create a viable product, the CHEMO must conduct a detailed cross-talk with the Battalion S2 to discuss issues such as enemy NBC weapons, delivery

capabilities, tactics of employment, and likelihood of employment. Once this has been completed, he must suggest to the Battalion Commander an appropriate MOPP level to match the threat.

There are a variety of aids used in assessing the potential NBC threat and NBC vulnerability. The best current single method to conduct both of these assessments is the utilization of the NBC Threat Analysis Worksheet and the Chemical Vulnerability Worksheet. Both of these forms are products originally produced by the U.S. Army Chemical School. Both worksheets ask a series of questions whose answers have an assigned numerical value. Once all of the numbers have been added together, the total determines the likelihood of an enemy NBC attack and the degree of vulnerability to an NBC attack faced by friendly forces. I have personally found these products to be quite useful and I highly recommend them to any CHEMO for use.

To supplement, or update an NBC threat analysis, it is useful to keep an ongoing log of NBC-related events. This log would be kept to maintain a log of NBC events such as the sighting or movement of chemical munitions, a change of enemy MOPP status, or any other event that can have an effect on NBC warfare. The log can be used to justify an update of the unit MOPP status, enemy NBC threat, and show a developing pattern in the enemy NBC stature. This log can be kept on a standard DA Form 1594 or a modified version of the form such as the example shown in Figure 1 on page 35.

[illegible]

A final product that can be utilized by the CHEMA should be a Chemical Target Worksheet listing units, terrain features, and other locations of interest to be targeted by the enemy (Figure 2 on page 36). Similar to a Fire Support Target Sheet, the Chemical Target Worksheet should list the target grid, description, type of agent to be used, and what interest

the enemy has in focusing on that target. The worksheet can be included in the NBC Annex of the Operations Order as an appendix and can serve to give commanders in the field warning of any potential chemical strike within their area of operations. This worksheet can help commanders plan for future NBC reconnaissance operations.

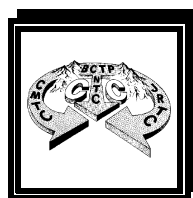


Figure 2. Sample Chemical Target Worksheet.

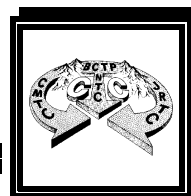


3. *NBC Tracking.* One of the first tracking systems that a CHEMO should develop is a way of accurately tracking Chemical Downwind Messages (CDMs) that are received from brigade headquarters. More often than not, CDMs become lost in the paper shuffle that occurs when messages are passed from one Battlefield Operating System (BOS) representative to another in the battalion Tactical Operations Center (TOC). It helps greatly when the CDMs are consolidated in one location for easy access and reference.

The best way to track CDM reports is to create a CDM Tracking Sheet (Figure 3). As the example shows, this sheet is formatted to fit the CDM format. All three lines are included along with the effective dates and times. All one has to do is plug in the numbers exactly as they are called over the radio. Above each column is the explanation for the corresponding numbers. Anyone can pick up this form and easily understand the information without having to refer to a copy of GTA 3-6-8 or FM 3-7, *Commander's NBC Handbook*.

	COMMAND DIRECTION IN DEGREES	WINDSPEED IN KNOTS	AIR STABILITY CODES	TEMP CODES	HUMIDITY CODES	SIGNIFICANT WEATHER	CLOUD COVER
DATE:	_____		_____				
START	_____		END _____				
WM							
XM							
YM							
DATE:	_____		_____				
START	_____		END _____				
WM							
XM							
YM							
DATE:	_____		_____				
START	_____		END _____				
WM							
XM							
YM							
DATE:	_____		_____				
START	_____		END _____				
WM							
XM							
YM							

Figure 3. Sample CDM Tracking Sheet



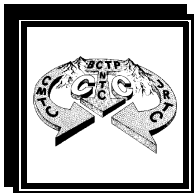
As the pace of battle gains speed, it becomes more important to keep an accurate picture of the effects of NBC warfare upon the battlefield. This becomes most important for battalion and brigade CSS assets as well as any follow-on forces that follow the light battalion through a contaminated battlefield. The importance of tracking NBC attacks can be easily compared to the tracking of obstacles, such as mines and wire, remaining behind following a battle.

Tracking sites of NBC contamination should be done in two ways. The most easily recognizable tracking method is the drawing of contaminated sites directly on the TOC tracking map. This is the easiest for commanders to identify especially when the type of agent and time of attack are clearly marked on the map as well.

The second form of tracking NBC attacks is by the use of an NBC Strike Log (Figure 4). All NBC strikes are logged on the form to include important data such as the attack grid, date and time of the attack and the reception of the report, and winds peed and direction. Although the pace of the battle might lead one to forget to utilize this log, it can serve as a useful tool to analyze the enemy's employment method for NBC weaponry, as well as an obvious reference to past enemy NBC weapons employment. The division NBC Center utilizes a similar form.

Report No.	Grid	DTG of Attack	OBSV and Loc.	Ag. Type

Figure 4. Sample NBC Strike Log



4. **NBC Plotting.** The best advice for NBC plotting is also the oldest. Plot a downwind hazard prediction for each case of employment tailored to the scale of map used in your TOC. Plot these predictions on overlay material and properly label them for each case. When a strike occurs, place these overlays on the map with the corresponding downwind direction. It saves a great deal of time and provides the quickest warning to friendly units. This technique is taught to every new CHEMO in COBC. Also keep a copy of the Downwind Hazard Prediction Flowchart in a file for easy reference.

5. **NBC Attack Confirmation.** During the battle, it is not unusual for soldiers in the field to misinterpret and event as a chemical attack. Often soldiers will interpret yellow smoke, in NTC ROE signifying a FASCAM minefield, for a chemical attack. Others will see standard white smoke used for obscuration and believe it to be a chemical attack. The most difficult thing for a light infantry CHEMO to do is to obtain confirmation of a chemical attack.

When a report of a chemical attack comes over the radio, the first question that should be asked is how was the attack confirmed? Ensure that the soldiers confirmed the attack with the use of M8 paper, M9 paper, M256 kit, or the M8 Alarm. Although this system seems self evident, it is more often than not overlooked. Having a reliable confirmation of an attack or a false alarm can prevent the loss of a unit's momentum by prematurely placing soldiers in MOPP4.

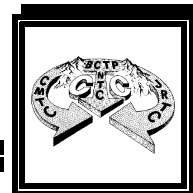
6. **Organization.** Keep all of your NBC forms and files in an easily accessible binder or folder for easy access and organization. During the battle, papers get shuffled, and information becomes confused as reports are received over the radio. Keeping your materials located in one complete binder will not only make them easily accessible but also will prevent them from becoming easily lost.

Conclusion

There are no secrets to performing the job of the light infantry CHEMO while deployed to the NTC. The methods and advice described in this article are far from the only ones available. Much of what has been described has been learned from the trial and error experiences of many CHEMOs as well as standard field manuals. Techniques and procedures are definitely not limited to what has been presented within these pages.

In the past, there has been very little published to aid the light infantry battalion CHEMO in the performance of his duties. For many CHEMOs, the performance of their NBC duties has been constant trial and error. By the time they create a viable system, it is already time to redeploy to their home station. Through this process, a large amount of time is wasted in just trying to get the proverbial horse out of the starting gate. This article has presented a viable starting point for the light infantry battalion CHEMO to begin preparing for a rotation at NTC and maximize the amount of learning time available during the rotation. ☺





COMPANY RESUPPLY TACTICS, TECHNIQUES, AND PROCEDURES

by CPT Frank Zimmerman, Assistant S-3, Operations Group, JRTC

The line infantry company, by design a maneuver force structured as part of a larger maneuver battalion, is inherently lean on Combat Service Support (CSS). That force design relies heavily on the ability of the battalion CSS system to keep the line companies supplied and ready for sustained combat in standard military operations. Yet Military Operations on Urbanized Terrain (MOUT) present particular stresses for the line company CSS system. They are similar in a way to Low Intensity Conflicts in that the line units are forced to operate as independent units within the compartments of a MOUT area. Battalion and company commanders must anticipate these different CSS requirements. Otherwise, the unit will not be able to sustain continuous operations. If the unit is to maintain momentum against the enemy, timely resupply is critical.

PREPARATION



The best time to plan for CSS in a MOUT situation is the same as in any operation. The successful unit plans for CSS during the preparation phase. The following observations and discussions target that need, one not always addressed by units at the Joint Readiness Training Center (JRTC).

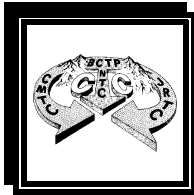
Observation: Rehearsals. Units fail to rehearse effectively CSS for urban MOUT. Typically, the rehearsals are pro forma and generate limited readjustments by the unit medical planners. The remaining logistical staff does not engage in the process.

Discussion: MOUT demands that units should thoroughly rehearse the entire CSS plan. Historically, MOUT generate high casualty rates and extremely high ammunition consumption. Those two factors alone stress the CASEVAC system and the ammunition

distribution system. Urban terrain -- especially fought over urban terrain -- often isolates the line units in a battalion fight. That factor demands that the battalion CSS system establish redundant distribution and collection points to offset unit isolation in MOUT.

TTP: War-Game the CSS Just as You War-Game the Fight.

Effective maneuver leaders war-game their plan. The CSS planners must do the same. Ideally, the CSS planners should attend the maneuver wargame because that allows them to synchronize CSS with maneuver. This synchronization identifies contingencies that require advanced logistical coordination. Appendix G, FM 101-5,



Staff Organization and Operations, and *CALL Newsletter No. 98-5*, Mar 98, *Rehearsals*, outline how to conduct such rehearsals.

Observation: Final CSS Prep: Units fail to capitalize on the preparation phase to “top off” logistics support. This is the ideal time to complete logistical coordination and preparations.

Discussion: Tactical Assembly Areas (TAAs) are the final opportunities for preparing soldiers before urban operations. Maneuver leaders use TAAs for final rehearsals and precombat inspections. Logistics leaders should use them as a final logistic point to support the soldiers. That final logistics point increases soldier efficiency and decreases combat stress. Having soldiers well supplied and mentally prepared only makes them better soldiers. The soldier top-off point may be used to rotate soldiers off the line for rest and resupply.

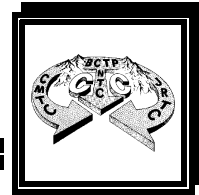
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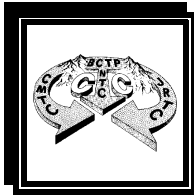
a. Soldier Top-Off Point. Establish a soldier top-off point for basic services at the TAAs, depending on METT-T. A forward support operation requires time and manpower, possibly corps support assets. If that is not possible, the brigade support area, or combat trains are alternatives. Units can issue Class I (food/water), Class V (ammunition), and other equipment items to the soldier.

The following are suggested CSS tasks at a “Soldier Top-Off Point.”

- **Receive mail/newspapers.**
- **Hot food** (with fresh fruit and cold/hot drinks).
- **Chaplain services/support.**
- **Showers.**
- **Combat health support** (re-stock of aid bags and combat lifesaver bags).
- **Supply issue points** (water, MRE, ammunition).
- **A-bag distribution** (allows the soldier to change into dry/clean clothes).
- **Sleep/rest area** (tent).
- **Briefing area** (tent).

b. Caches. When METT-T dictates that larger scale soldier top-off points are not possible, smaller caches may be the answer. CSS planners can establish a system of small manned “caches.” Sited in a relatively secure location, these caches can support soldiers engaged in MOUT. The caches should be defensible and easily accessible by vehicles. Techniques for establishing caches are found in FM 90-10-1, para E-2, subparagraph c, Other Construction Tasks.





e. Conserve Friendly; Seize Enemy. Supplies left on dead or seriously wounded soldiers are wasted supplies. Otherwise, these supplies get sent to the rear with the casualty captured by the enemy. Enemy logistical units are often good sources for food and other supplies. Targeting enemy logistics in urban combat eases pressure on friendly logistics and stresses that of the enemy.

f. Forage and Scavenge. *FM 7-10, Infantry Company*, addresses foraging and scavenging inside the urban area. Leaders must consider whether the supplies are safe, booby-trapped, or if using them is legal. Unit leaders entering MOUT should consider foraging and scavenging under the Rules of Engagement (ROE). City maps often identify locations where supplies are available. Ideally such techniques should be used only in long-term urban operations, especially if the friendly logistical system fails.

g. Speed Balls. Helicopters are another means for getting supplies to soldiers. Landing zones are limited and often covered by the enemy in surrounding buildings. Speed and simplicity are keys in aerial resupply. Open areas, such as rooftops, parking lots, junkyards, or parks, are potential supply drop-off points. Supplies packed in aviation kit bags or duffel bags can be dropped in quick “in and out” supply flights.

h. Fast Rope. Similarly, water cans and bagged supplies can be fast-rope down to units engaged in MOUT. The helicopter does not have to get close to the roof or to a secure site. Additionally, the extract point where the unit receives the rope can back-haul empty water cans and other items.

i. SKEDCO. Squads and platoons can use SKEDCO litters to move supplies, especially mortar rounds, in a rubble urban area or through sewers. Using basic mountaineering techniques, the SKEDCO can haul supplies along the side of a building, through elevator shafts, or destroyed stairwells, to the upper floors of a building.

BATTLE-TRACKING

Observation: Knowing How Much Is Needed Is As Important As What Is Needed. Overburdening a soldier or a supply point with excess supplies can hinder the logistical system just as much as the lack of supplies.

Discussion: Once urban operations begin, logisticians need to “push” supplies based on METT-T. That dictates that the logisticians maintain situational awareness in their support to the maneuver leader. “The right amount of supplies at the right time” is the CSS standard. Resupply based on forecast consumption beyond battalion level should be minimized to avoid too many supplies building up at the forward areas. CSS leaders and staff must anticipate future missions. Again, this is directly related to synchronizing the CSS plan with maneuver to identify logistical branches and sequels.

TTP:

a. First Sergeants and Company XOs. The XO and the 1st Sergeant are CSS battle trackers at the company level. The supply sergeant is the CSS operator. Together they must track the battle to identify what supplies to push forward. The platoon sergeant and the RTO are the CSS trackers and operators for the platoons.

b. Tracking Techniques. Track maneuver elements and their supporting and adjacent logistical elements. Use grids and symbols for locations. A CSS/CHS overlay should provide the initial location of these elements.



Track unit status with a combination of number and color codes. Tracking charts should be self-explanatory. These charts must be updated by monitoring the appropriate radio nets (command or operation intelligence nets).

c. CSS Huddles. Maneuver planners huddle and produce FRAGOs as the battle evolves. CSS planners must “huddle” as well, preferably side by side with the maneuver leaders. These huddles analyze the latest information and translate it into future support requirements. Having staff huddles to review past actions and projected upcoming events is one method of determining in these requirements.

CIVILIANS ON THE BATTLEFIELD

Of all the forms of war, MOUT presents the greatest potential for encountering civilians on the battlefield. During a conflict within an urban area of any size, the military will have to plan for dealing with the mass exodus of displaced civilians living in and around an urban area.

OBSERVATION: Population densities in modern urban areas. Most modern urban areas have populations that exceed the hundreds of thousands. Many major urban areas are home to millions of people. In certain areas of the world, such as Europe or parts of Asia, the populations are so large that they may only be able to displace locally. That means that units going into a MOUT should expect a civilian presence in the area.

Discussion: Civilians in an urban area will stress the logistical system. Without proper planning, this situation can overwhelm the unit, depleting supplies and halting combat operations. Commanders, planners, and military logisticians must coordinate noncombatant operations with the separate agencies that will be in the area of operations, i.e., Host-Nation organizations and the international Red Cross.

TTP: Plan for Civilians. CSS planners, however, should not assume that such bodies will be able to completely handle the task. In fact, Change 1, FM 90-10-1, directs that commanders are responsible for sustaining civilian populations within their area until some other organization can assume that role. At the tactical level, the best technique is to use the extant CSS system to encourage them to move away from the fighting. When that is impossible, the unit should encourage them to “go to ground” until the immediate fighting moves past.

CONCLUSION

MOUT offers special challenges to logistical support at battalion and below. In some regards, the man-made compartments in a city stresses a battalion logistical system just like operations in mountains or jungles. Companies operate independently and the CSS system must adapt. MOUT also consumes ammunition and people at a higher rate than comparable fights on open terrain. Contending forces must fight it out a close range. Sustaining such a fight not only demands more ammunition and replacements, it also requires special efforts to sustain soldiers' morale and effectiveness. Doing that effectively demands that maneuver and CSS plans be integrated for both current and projected operations. Finally, the CSS planners at the tactical level must expect that noncombatants will be a pervasive challenge in MOUT.★